

Municipality/Organization: Town of Cohasset

EPA NPDES Permit Number: MA041032

MaDEP Transmittal Number: W-041051

**Annual Report Number
& Reporting Period:** #3 April 05 – March 06

SEP - 5 2006

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Dr. Joseph R. Godzik, VMD **Title:** Health Agent

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: 

Printed Name: Dr. Joseph R. Godzik, VMD

Title: Health Agent

Date: August 21, 2006

Part II. Self-Assessment

There has been a definite positive attitude toward dealing with Stormwater issues in the Town during the past year. More and more residents are beginning to realize the adverse impacts of stormwater on receiving waters, and that something has to be done about it. On the Town's side, the Water Resources Protection Committee has been quite active, and has, more or less taken on the role of a Stormwater Management Committee however there is talk of appointing a true Stormwater Management Committee in the future. The Selectmen have also appointed a Health of the Harbor Committee to oversee water quality in Cohasset Harbor and investigate such issues as lobster die offs in the lobster cars, shellfish bed closures, the lack of shellfish, eelgrass restoration and metal corrosion. Stormwater pollution could play a significant role in any or all of these issues. Representatives of various committees which have interests in stormwater are meeting on a regular basis. These meetings are being coordinated by the Greenbush Team which oversees work done by the MBTA on the Greenbush Railway restoration.

Public outreach has continued and is making people more aware of how they personally can impact stormwater quality. Greenscapes literature was mailed to all households and is available at the Board of Health and the Library. Stephen Bobo of the Board of Health continues to address stormwater issues in some of his weekly "Health Notes" column. Members of the above noted committees periodically write letters to the editor of local papers addressing issues which include stormwater.

The Water Department continues to make progress in stormwater mitigation in area of the water supply. A demonstration rain garden was installed in June 2005 at the Lily Pond treatment plant. In August 2005 the Water Department awarded a BMP Improvement Project for \$52,000.00. The project included two regulated swales at the Lily Pond Treatment Plant, and four rain gardens in the Peppermint Brook Watershed at the end of Evergreen and Arrowwood Roads, on Pond Street in front of the high school and on King Street. The project was started in November 2005 but was put on hold because of cold weather. It is scheduled to be completed by the end of May 2006. Other projects are in process. The Water Department also developed a presentation on rain gardens. IT will be shown to groups like the Cohasset Garden Club and the Gulph Association.

The Town, working through its Board of Health, was awarded a grant from Coastal Zone Management to evaluate stormwater pollution into James Brook and Cohasset Harbor. The grant includes working with volunteers from the Center for Student Coastal Research and the establishment of a Watershed Academy for training volunteers to sample and analyze water samples for enterococci, fecal coliform, total suspended solids, nitrates, temperature, salinity, dissolved oxygen and conductivity. The above parameters plus total Kjeldahl nitrogen and total petroleum hydrocarbons to be performed by a certified laboratory will all be sampled in dry and wet events during the spring. Mapping of the stormwater system in the lower James Brook was completed in March 2006. A report analyzing the collected data and proposed BMP's will be available in the summer of 2006. Because of the multiple problems in Cohasset Harbor, the Board of Health focused on the James Brook grant rather than Little Harbor.

The town is still working on passing a stormwater bylaw. This bylaw may be patterned after the model used by Duxbury, Marshfield and Plymouth.

Implementation

Since the Committee was only reactivated in the summer of 2004, and their forces was on getting the lawn care initiative started, they have not yet taken over the role of stormwater management in general. The Committee is composed of representatives of various Town boards who provide public education and outreach through their organizations. The Gulf Association has held informational meetings in which stormwater issues play a prominent role. Students participating in

programs of the Center for Student Coastal Research (CSCR) continue to provide data relating to Cohasset Harbor, Little Harbor and the Gulf River. A report "Study of Sources and Trends of Pollution in Cohasset's Little Harbor", (Aug 2004) looked at fecal coliform sources in an effort to provide data to help reduce the total load and bring the Little Harbor waters into compliance with the TMDL for fecal coliforms. Student participation in the volunteer monitoring program has been excellent. Students at the CSCR are now capable of performing the following water quality tests: fecal coliform; enterococci; total suspended solids, dissolved oxygen, salinity, nitrates, temperature and pH. As data accumulates, they will provide a focus for mitigation and remediation efforts. The Adult monitoring volunteer program has not fared so well. There is essentially no adult volunteer monitoring corps at this time.

Officials from the Town met with representatives of the Scituate Board of Health and Department of Public Works to discuss impacts from Scituate on the Gulf River. Most of the impacts are sewage related. But since some septic systems appear to be connected to the stormwater system there appear to be some point sources of pollution. Water Quality monitoring helped pinpoint these sources. The North Scituate Village area which is the source of the discharges is scheduled to be sewered in Phase 4 of Scituate's sewerage program. It is not clear what plans Scituate has in the interim.

The Board of Health drafted Constructed Site Runoff Control and Post-Construction Stormwater Management by-Laws for the Annual Town Meeting in March 2006. These were withdrawn at Town Counsel's request. The Town Manager has committed to getting the appropriate town board or commission to enforce the by-laws. They will be revised and presented at the next annual town meeting.

Connectivity mapping between catch basins and outfalls has not progressed. Again a budget request for an additional 0.25 FTE for the Department of Public Works did not make it into the budget. All departments saw reductions in their budgets in an effort to reduce or eliminate any Proposition 2 ½ override. The Peppermint Brook remediation project was designed and put out to bid. Construction should begin in the summer of 2005.

The Board of Health is planning to initiate a request for a Coastal Pollution Remediation grant to improve the Cohasset DPW plan for catch basin maintenance as a part of its upgrade of structures in Little Harbor. Specifically, the DPW hopes to carry out better oversight of its catch basin condition reporting as a part of its maintenance program, together with upgrading stormwater structures in the Little Harbor Watershed.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Progress on Goals – Permit Year 3	Planned Activities Year 4
Health Notes to Cohasset Mariner	BOH – Steve Bobo	Phone calls relating to the article	Continue with articles.	Continue with articles.	Continue with articles
Information Mailing	Water Commission	Households Reached		Continue Mailings	Continue mailings
Beach and Stream Cleaning Day	Citizens	Number of truckloads of material disposed		Completed one cleanup	Have a cleaning day annually.

1a. Additions

BMP Description	Responsible Dept./Person	Measurable Goal	Progress on Goal(s) – Permit Year 2	Progress on Goals Permit Year 3	Planned Activities Permit Year 4
Utilize local groups	BOH Steve Bobo and CMHS Faculty	Attendance at related meetings	Closer associations have been made with garden clubs; Student Center for Coastal Research and Gulf Association	Expand stormwater related programs Establishment of Watershed Academy with the Student Center for Coastal Research (CSCR). Expanded to include students from adjacent communities.	Expand number of students/volunteers attending. Increase subjects taught.

2. Public Involvement and Participation

BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Progress on Goals – Permit Year 3	Planned Activities Year 4
Volunteer Monitoring Program Water Quality	BOH Steve Bobo and CHS Faculty	Reports on water quality	Continued sampling and added enterococci testing and total suspended solids. Fecal coliform study of Little Harbor was completed.	Continued sampling Study of Cohasset Harbor completed.	Continue sampling of Cohasset Harbor, Gulf River and North Scituate. Work with EPA on Bassings Beach Project.
Collect samples from stormdrain outfalls after storm events	BOH CHS Faculty	Reports on water quality	Students from CSCR collected a few samples from outfalls going into the Gulf River and Little Harbor and tested for TSS and fecal coliform. Continued sampling except for Little Harbor	Increase number of locations sampled and frequency of sampling. Sampling parameters include fecal coliform, enterococci, nitrates, total suspended solids, dissolved oxygen, temperature, salinity, pH and conductivity.	Sample lower James Brook catch basins and outfalls during dry and wet events. Write report. Apply for grant to expand work.
Beach and Stream Cleanup Day		Annual or more frequent cleanup of area beaches, drainage areas, streams etc		Citizen volunteers picked up litter and debris and filled five loads of a one ton pickup truck. Materials disposed of at Transfer Station.	

2a. Additions

Greenscapes Program	Water Resources Protection Committee, James Kinch, Chairman	Number of participants	Program to start in Year 3.	Materials mailed to all residents. Materials also available at the Board of Health and Library.	Continue program by having materials available.
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3. Illicit Discharge Detection and Elimination

BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Progress on Activities – Permit Year 3	Planned Activities Year 4
Connectivity Mapping	DPW Carl Sestito	Complete field form. Put information into GIS catch basin and outfall mapping	No progress	Connectivity mapping completed for Lower James Brook.	Continue gathering data. Attempt to get additional 0.25 FTE to continue work.
Illicit Connection Regulation	BOH Steve Bobo	Number of connection reported and removed	One report of sewer connected to storm drain removed.	No additional illicit connections discovered.	Continue to enforce regulation

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Progress for Goals – Permit Year 3	Planned Activities for Year 4
Bylaw Development	BOH Steve Bobo	Adoption of Bylaw / Regulation	Effort to incorporate elements into Conservation Commission Regulations. From recommendation by Town Counsel	No progress.	Attempt to get a Bylaw passed at Town Meeting. Write implementing regulations. Get a Stormwater Committee appointed that will push for bylaw passage.

4a. Additions

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Progress on Activities – Permit Year 3	Planned Activities for Year 4
Bylaw development	BOH Steve Bobo	Adoption of bylaw	Effort to incorporate elements into Conservation Commission Regulations. From recommendation from Town Counsel	No progress.	Attempt to get a Bylaw passed at Town Meeting. Write implementing regulations. Get a Stormwater Committee appointed that will push for bylaw passage.

5a. Additions

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Progress on Activities – Permit Year 3	Planned Activities for Year 4
Stormwater BMP for Peppermint Brook	Water Commission John McNabb	BMP's development construction progress	Request to MADEP to extend the award for the project to July 31, 2005	Rain Gardens completed around Lily Pond Water Treatment Plant and in Peppermint Brook Basin.	Construction of BMP's to continue in Peppermint Brook Basin.
Catch basin cleaning and maintenance	DPW Carl Sestito	Number of catch basins cleaned.	Catch basin cleaning is on going.	Catch basin cleaning on going	Catch basin cleaning to be on-going.
Develop signage for catch basins and other infrastructure	Water Resource Protection Commission, James Kinch, Chairman	Number of catch basins signed	None	Signage developed, catch basins not labeled.	Signage to be applied to catch basins with outfalls to Cohasset Harbor, Little Harbor, James Brook, Straits Pond.

6a. Additions

	Street sweeping	DPW Carl Sestito	Number of streets swept	Street sweeping in spring	Street sweeping in spring	Continue street sweeping
	Training	DPW Carl Sestito	Educate all DPW staff on catch basin cleaning and street sweeping protocols.			Training plan and program will be implemented in Program Years 4 and 5

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
Revised					
Revised				INTENTIONALLY LEFT BLANK	
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$)	0

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	100%
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Y
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	13
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	Y

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				X
▪ Erosion & Sediment Control			X	
▪ Post-Development Stormwater Management			X	
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				X
▪ Erosion & Sediment Control			X	
▪ Post-Development Stormwater Management			X	

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	330
System-Wide mapping complete	(%)	0
Mapping method(s)		
▪ Paper/Mylar	(%)	0
▪ CADD	(%)	0
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	100%
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	40
% of population on septic systems	(%)	60

Construction

Number of construction starts (>1-acre)	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	
Site inspections completed	(# or %)	0
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	0
Site inspections completed	(# or %)	0
Estimated volume of stormwater recharged	(gpy)	0

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	
Total number of structures cleaned	(#)	
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
Cost of screenings disposal	(\$)	

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	